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CLAIMS

1. A metrics server in an intranet comprising:
a network interface device configured to non-intrusively
measure network traffic transferred in and out of an intranet for
at least one connection, the at least one connection being a
logical path from a specific source to a specific destination;
and

a processor coupled to the network interface device and
configured to generate performance metrics for a predetermined
measurement time interval using the measured network traffic for
the at least one connection.

2. The metrics server of claim 1 wherein the at least one
connection is delimited by a first packet from the specific
source to the specific destination and a last packet from the
specific source to the specific destination.

3. The metrics server of claim 2 wherein the specific
source is identified by a source Internet Protocol address in the
first packet and the specific destination is identified by a
destination Internet Protocol address in the first packet for the
at least one connection.

4. The metrics server of claim 3 wherein the specific
source is the metrics server and the specific destination is at
least one client outside the intranet and the measured network
traffic includes packets being transferred between the metrics
server and the at least one client.

5. The metrics server of claim 3 wherein the specific
destination is at least one client outside the intranet and the
specific source is at least one server in the intranet and the
measured network traffic includes packets being transferred
between the at least one server and the at least one client.

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C 5 6. The metrics server of claim 4 wherein the network interface device is further configured to filter the measured network traffic such that only header information contained within the packets being transferred are captured by the network interface device.

10 7. The metrics server of claim 6 further comprising a memory coupled to the network interface device and the memory stores the measured network traffic.

Sub A2 15 8. The metrics server of claim 7 wherein the memory further stores an active connection table containing entries for the at least one connection that is active during the predetermined measurement time interval.

C 20 9. The metrics server of claim 8 wherein the processor is further configured to update the active connection table based on the measured network traffic and the predetermined measurement time interval.

25 10. The metrics server of claim 9 wherein the processor is further configured to accumulate the performance metrics generated for the at least one connection that extends pass the predetermined measurement time interval.

30 11. The metrics server of claim 10 wherein the processor configured to generate performance metrics includes the determination of source and destination Internet Protocol addresses and timestamp information of the packets captured within the predetermined measurement time interval.

Sub A3 35 12. The metrics server of claim 11 wherein the predetermined measurement time interval is one minute.

1 13. The metrics server of claim 12 wherein the network
interface device is further configured to intrusively measure
5 network traffic transferred in and out of the intranet for the
at least one connection for the generation of a specific
performance metric.

10 14. A measurement infrastructure comprising:
a plurality of clients outside an intranet;
at least one server inside the intranet coupled to the
plurality of clients outside the intranet; and
a metrics generator coupled to the at least one server, the
metrics generator is configured to non-intrusively measure
15 network traffic being transferred in and out of the at least one
server and to generate performance metrics from the network
traffic measured.

20 15. The measurement infrastructure of claim 14 wherein the
network traffic measured by the metrics generator includes
packets being transferred for at least one connection, the at
least one connection being a logical path from the metrics server
to one of the plurality of clients outside the intranet.

25 16. The measurement infrastructure of claim 15 wherein the
performance metrics generated by the metrics generator is for a
predetermined measurement time interval using the measured
network traffic for the at least one connection.

30 17. A measurement infrastructure comprising:
a plurality of clients outside an intranet; and
a first metrics server inside the intranet coupled to the
plurality of clients and configured to non-intrusively measure
35 network traffic being transferred in and out of the intranet and
to generate performance metrics based on the network traffic
measured.

1 18. The measurement infrastructure of claim 17 wherein the
network traffic measured by the first metrics server includes
packets being transferred for at least one first connection, the
5 at least one first connection being a logical path from the first
metrics server to one of the plurality of clients outside the
intranet.

10 19. The measurement infrastructure of claim 18 wherein the
performance metrics generated by the first metrics server is for
a predetermined measurement time interval using the measured
network traffic for the at least one first connection.

15 20. The measurement infrastructure of claim 19 further
comprising a second metrics server that is configured to non-
intrusively measure network traffic being transferred in and out
of the intranet and to generate performance metrics based on the
network traffic measured.

20 21. The measurement infrastructure of claim 20 wherein the
network traffic measured by the second metrics server includes
packets being transferred for at least one second connection, the
at least one second connection being a logical path from the
second metrics server to one of the plurality of clients outside
25 the intranet.

30 22. The measurement infrastructure of claim 21 wherein the
performance metrics generated by the second metrics server is for
a predetermined measurement time interval using the measured
network traffic for the at least one second connection.

35 23. The measurement infrastructure of claim 22 wherein the
first metrics server distributes performance metrics generated
by the first metrics server to the second metrics server in the
intranet.

1 24. The measurement infrastructure of claim 23 wherein the
second metrics server distributes performance metrics generated
by the second metrics server to the first metrics server in the
intranet.

5 25. The measurement infrastructure of claim 24 wherein the
distributed performance metrics includes only the performance
metrics generated by the first metrics server and the second
metrics server that are different from any previously distributed
performance metrics by the first metrics server and the second
metrics server.

10 26. The measurement infrastructure of claim 24 wherein the
performance metrics generated by the first and second metrics
servers are distributed on a predetermined periodic basis.

15 27. The measurement infrastructure of claim 26 wherein the
predetermined periodic basis is one minute after performance
metrics have been generated by the first and second metrics
servers.

20 28. A method of providing network performance metrics using
an intranet, the intranet having at least one server, the method
comprising:

25 non-intrusively measuring network traffic between at least
one server in an intranet and at least one client outside the
intranet; and

30 generating performance metrics from the network traffic
measured between the at least one server and the at least one
client within a predetermined measurement time interval.

35 29. The method of providing network performance metrics of
claim 28 wherein the non-intrusive measurement of network traffic

1 and the generation of performance metrics are performed by the
at least one server.

5 30. The method of generating network performance metrics
of claim 29 wherein the non-intrusive measurement of network
traffic includes copying packets being transferred between the
at least one client and the at least one server to a memory
buffer of the at least one server.

10 31. The method of generating network performance metrics
of claim 30 further comprising intrusively measuring network
traffic between the at least one server and the at least one
client in an intranet.

15 32. The method of generating network performance metrics
of claim 31 wherein the intrusive measurement of network traffic
includes injecting and monitoring probing packets that are
transferred between the at least one server and the at least one
20 client outside the intranet.

25 33. The method of generating network performance metrics
of claim 32 further comprising distributing performance metrics
generated by the at least one server to another at least one
server inside the intranet.

34. A method of providing network performance metrics using
an intranet, the intranet having at least one server, the method
comprising:

30 non-intrusively measuring network traffic for at least one
connection, the at least one connection being a logical path
between at least one server inside an intranet and at least one
client outside the intranet;

35 generating performance metrics from the network traffic
measured based on the at least one connection within a
predetermined measurement time interval; and

1 accumulating the generated performance metrics for the at
least one connection that remains active beyond the predetermined
measurement time interval.

5 35. The method of generating network performance metrics
of claim 34 further comprising distributing performance metrics
generated.

10 36. The method of generating network performance metrics
of claim 35 further comprising intrusively measuring network
traffic for the at least one connection.

15 37. A method of providing network performance metrics using
an intranet, the intranet having at least one server, the method
comprising:

20 examining packets being transferred during a plurality of
connections, such that each connection of the plurality of
connections is a logical path between at least one server in the
intranet and at least one client outside the intranet;

25 generating performance metrics from the examined packets for
the plurality of connections upon the expiration of a
predetermined measurement time interval;

30 accumulating performance metrics from the generated
performance metrics for the plurality of connections for each of
the plurality of connections that remain active beyond the
predetermined measurement time interval;

35 creating a record for each connection of the plurality of
connections that are active during a predetermined measurement
time interval; and

deleting each created record corresponding to each
connection of the plurality of connections that becomes inactive
beyond the predetermined measurement time interval.

38. The method of generating network performance metrics
of claim 37 further comprising distributing performance metrics

1 generated and accumulated upon the expiration of a predetermined
measurement time interval.

5 39. The method of generating network performance metrics
of claim 38 further comprising continuing to examine packets and
generate, accumulate and distribute performance metrics for a
plurality of successive predetermined measurement time intervals.

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